

LEGGETTE, BRASHEARS & GRAHAM, INC.
CONSULTING GROUND-WATER GEOLOGISTS

R. G. SLAYBACK
G. SIDNEY FOX
FRANK H. CRUM
MICHAEL R. BURKE
ROBERT LAMONICA

EDWARD T. SIMMONS
CONSULTANT

72 DANBURY ROAD
WILTON, CT 06897
203-762-1207

CABLE ADDRESS - LEGRAGRA

HARRY F. OLESON
WILLIAM K. BECKMAN
DAN C. BUZEA
DOUGLAS E. SIMMONS
JOHN NASO, JR.
W. PETER BALLEAU

February 2, 1988

SDMS Document



112444

Mr. John Hanna
Whiteman, Osterman & Hanna
99 Washington Avenue
Albany, NY 12210

RE: Ruco Polymer Corporation Site,
Hicksville, New York

Dear Mr. Hanna:

Enclosed is a progress report on definition of the soil contamination near the pilot plant at the referenced site. We understand that Occidental Chemical Corporation would like to address this problem in the first half of this year, and the next sampling round will occur in February 1988.

Please let me know if you have any questions on the enclosed.

Very truly yours,

LEGGETTE, BRASHEARS & GRAHAM, INC.

Robert Lamonica

Robert Lamonica, CPG
Vice President

RL:gtk
Enclosure
88rl

HRC
001 0769
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April, 1988. It is anticipated that the soils can be excavated and landfilled starting in May.

LEGGETTE, BRASHEARS & GRAHAM, INC.

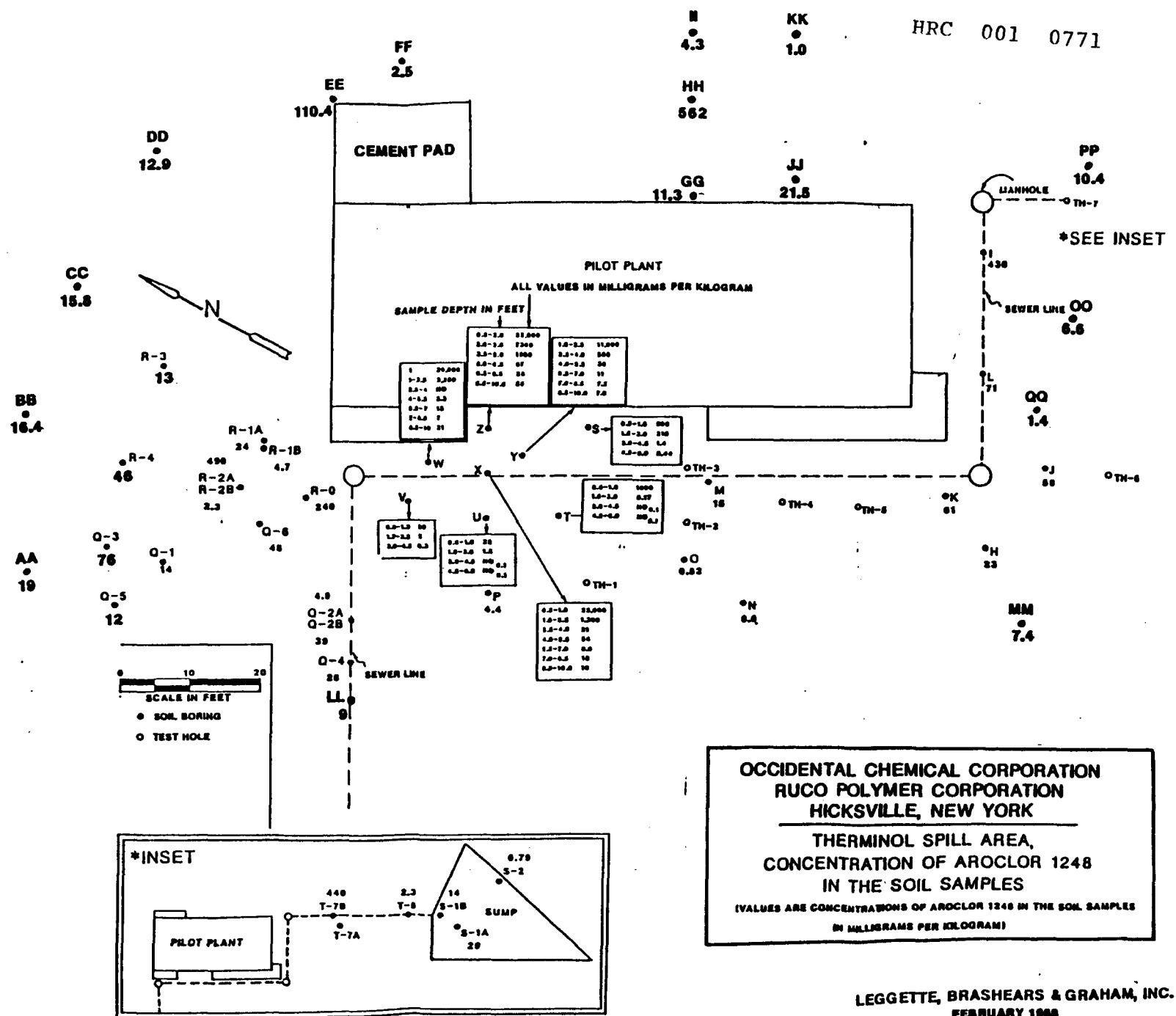
Robert Lamonica, CPG
Vice President

gtk
February 2, 1988
Enclosure
88rl

HPC 001 0770

LEGGETTE, BRASHEARS & GRAHAM, INC.

HRC 001 0771



To A.F. Weston Date January 13, 1988
From T.J. Yagley
Subject Aroclor 1248 Content of the Soils from Hicksville, N.Y.

COPIES: R.G. Badger, P.T. Holt, W.E. Leroux, TIC

Project Personnel: M.L. Rougeux

SPECIAL ENVIRONMENTAL

JAN 18 REC'D

SUMMARY

On December 18, 1987, eighteen soil samples from Hicksville, N.Y. were submitted for determination of their Aroclor 1248 content. Of those samples submitted, ten sites had concentrations of Aroclor 1248 higher than 10 ppm, and of those ten sites two had concentrations higher than 100 ppm. The remaining eight sites had Aroclor 1248 concentrations less than 10 ppm.

INTRODUCTION

In order to determine the extent of contamination, soil samples from eighteen sites at Hicksville, New York were analyzed for their Aroclor 1248 content. These samples were analyzed using the EPA CLP methodology, making slight variations of the method where needed.

EXPERIMENTAL

Before the work-up, each sample was forced through a #8 mesh sieve to separate the friable material from the non-friable material, (U.S. Standard Testing Sieve, #8 mesh, A.S.T.E-11 specifications, 2.36 mm opening). After sieving, the soils were tumbled for one hour to improve homogeneity, (Rotary Tumbler, Model 33B, Lortone, Inc.). These samples were now ready for analysis. One gram of sample was transferred to a 50 mL beaker, sodium sulfate was stirred in until the sample had a sandy texture, 50 μ L of 20 ppm hexachlorobenzene (C66) in acetone was added as an internal standard and 10.0 mL of hexane was then added as the extraction solvent. The sample was then extracted for two minutes using a sonic disrupter (Heat Systems, Ultrasonics, Inc.), after which time the extract was decanted to a 5 mL Teflon-lined screw-top vial until analysis. Recovery experiments were performed in the same manner, with the addition of Aroclor 1248 occurring before the addition of hexane.

Determination of the moisture content of each sample was done by transferring approximately five grams (0.01 g accuracy) to a tared aluminum pan and heating for two hours at 110°C. After cooling in a dessicator, the samples were re-weighed and the moisture content was determined.

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A.F. Weston
Aroclor 1248 Content of the Soils from Hicksville, N.Y.
January 13, 1988

Page 2

RESULTS AND DISCUSSION

The results of this analysis can be found in Table I. The concentration of Aroclor 1248 is given in ug/g on a dry weight basis. Also given in Table I are the recoveries of the C66 surrogate, expressed as a percent of the original 1.0 ug added. Because it was not required by the CLP this figure has not been corrected for percent moisture.

Table II contains the results of three duplicate analysis. Site 216 and 225 were chosen for duplicate analysis because of their relatively low Aroclor 1248 concentrations. After weighing out two portions for duplicate analysis, a third portion was weighed out for spiking purposes. Site 216 was spiked with 4 ug/g Aroclor 1248, Site 225 was spiked with 2 ug/g of Aroclor 1248, while Site 232 was spiked with 1 ug/g of Aroclor 1248. This data is found in Table III. Spiking three different samples at three different levels provided an extra dimension to the recovery process. Site 232 was collected as a field blank and after analysis showed that it was indeed free of Aroclor 1248 it was used as a method blank and method blank spike. Table IV contains the moisture content of each soil. Percent moisture was determined by:

$$\frac{\text{grams wet weight} - \text{grams dry weight}}{\text{grams wet weight}} \times 100$$

Timothy J. Yagley
Timothy J. Yagley
Chemist
Central Sciences

/jb
Attachments

HRC 001 0773

Table I

Concentration of Aroclor 1248
Hicksville, N.Y.
ug/g dry weight basis

<u>Sample I.D.</u>	<u>OCC Log #</u>	<u>Aroclor 1248</u>	<u>% C66 Recovery</u>
S-215AA001A1	87-1642	19.0	55
S-216BB001A1	87-1643	14.5*	99
S-217CC001A1	87-1644	15.8	97
S-218DD001A1	87-1645	12.9	97
S-219EE001A1	87-1646	110.4	110
S-220FF001A1	87-1647	2.5	94
S-221GG001A1	87-1648	11.3	73
S-222HH001A1	87-1649	562.0	87
S-223II001A1	87-1650	4.3	80
S-224JJ001A1	87-1651	21.5	98
S-225KK001A1	87-1652	0.7*	95
S-226LL001A1	87-1653	9.0	100
S-227MM001A1	87-1654	7.4	97
S-228MM002A1	87-1655	8.3	72
S-22900001A1	87-1656	6.6	100
S-230PP001A1	87-1657	10.4	110
S-231QQ001A1	87-1658	1.4	100
S-232FB001A1	87-1659	ND0.1	100

(* denotes the average of duplicate analysis)

REVISED 1/18/88

Table IIResults of Duplicate Analysis
ug/g dry weight basis

<u>Sample ID</u>	<u>Exp. 1</u>	<u>Exp. 2</u>
S-216BB001A1	14.2	14.7
S-225KK001A1	0.83	0.62
S-232FB001A1	ND0.1	ND0.1

Table IIIResults of Spiking Experiments
ug/g dry weight basis

<u>Sample ID</u>	<u>Analysis</u>	<u>Added</u>	<u>Expected</u>	<u>Found</u>	<u>Recovered (%)</u>
S-216BB001A1	14.5	4.0	18.5	18.2	3.7 (93)
S-225KK001A1	0.7	2.0	2.7	3.1	2.4 (120)
S-232FB001A1	0.0	ND0.1	1.0	1.3	1.3 (130)

Table IV
Moisture Content
Soils from Hicksville, N.Y.

Sample ID	% Moisture
S-215AA001A1	2.98
S-216BB001A1	10.32
S-217CC001A1	7.24
S-218DD001A1	11.96
S-219EE001A1	10.86
S-220FF001A1	6.70
S-221GG001A1	12.85
S-222HH001A1	10.04
S-223II001A1	6.56
S-224JJ001A1	18.89
S-225KK001A1	5.06
S-226LL001A1	7.02
S-227MM001A1	7.61
S-228MM002A1	****
S-22900001A1	5.65
S-230PP001A1	6.69
S-231QQ001A1	4.45
S-232FB001A1	20.43

**** Moisture content of this sample not determined since the sample consisted only of rock and gravel.

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PESTICIDE/PCB STANDARDS SUMMARYLab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Instrument ID: HP 5840GC Column ID: DB-5

COMPOUND	RT	RT		CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	HRC 001 0777
		WINDOW FROM	TO					
alpha-BHC								
beta-BHC								
delta-BHC								
gamma-BHC								
Heptaclor								
Aldrin								
Hept. Epoxide								
Endosulfan I								
Dieldrin								
4,4'-DDE								
Endrin								
Endosulfan II								
4,4'-DDD								
Endo.Sulfate								
4,4'-DDT								
Methoxychlor								
Endrin Ketone								
a. Chlordane								
g. Chlordane								
Toxaphene								
Aroclor-1016								
Aroclor-1221								
Aroclor-1232								
Aroclor-1242								
Aroclor-1248		15.0	30.0	1.0				y
Aroclor-1254								
Aroclor-1260								

Under QNT Y/N: enter Y if quantitation was performed, N if not performed. %D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criterion.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition.

page of

9
PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Instrument ID: HP 5840 GC Column ID: DB-5

COMPOUND	RT	RT		CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	#D
		WINDOW FROM	TO					
alpha-BHC								
beta-BHC								
delta-BHC								
gamma-BHC								
Heptaclor								
Aldrin								
Hept. Epoxide								
Endosulfan I								
Dieldrin								
4,4'-DDE								
Endrin								
Endosulfan II								
4,4'-DDD								
Endo. Sulfate								
4,4'-DDT								
Methoxychlor								
Endrin Ketone								
a. Chlordane								
g. Chlordane								
Toxaphene								
Aroclor-1016								
Aroclor-1221								
Aroclor-1232								
Aroclor-1242								
Aroclor-1248		15.0	30.0	1.0			y	
Aroclor-1254								
Aroclor-1260								

Under QNT Y/N: enter Y if quantitation was performed, N if not performed.
 #D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteri

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9
PESTICIDE/PCB STANDARDS SUMMARYLab Name: Occidental Chemical Corp.

Contract: _____

Lab Code: _____ Case No.: _____

SAS No.: _____ SDG No.: _____

Instrument ID: HP 5840GC Column ID: DB-5

DATE(S) OF ANALYSIS	FROM: <u>12/21/87</u>	TO: <u>12/28/87</u>	DATE OF ANALYSIS <u>12/24/87</u>
TIME(S) OF ANALYSIS	FROM: _____	TO: _____	TIME OF ANALYSIS <u>C315</u>

COMPOUND	RT	RT WINDOW	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	\$
		FROM	TO				
alpha-BHC							
beta-BHC							
delta-BHC							
gamma-BHC							
Heptaclor							
Aldrin							
Hept. Epoxide							
Endosulfan I							
Dieldrin							
4,4'-DDE							
Endrin							
Endosulfan II							
4,4'-DDD							
Endo. Sulfate							
4,4'-DDT							
Methoxychlor							
Endrin Ketone							
a. Chlordane							
g. Chlordane							
Toxaphene							
Aroclor-1016							
Aroclor-1221							
Aroclor-1232							
Aroclor-1242							
Aroclor-1248		15.0	30.0	1.0			y
Aroclor-1254							
Aroclor-1260							

Under QNT Y/N: enter Y if quantitation was performed, N if not performed.
 %D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criterion.

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9
PESTICIDE/PCB STANDARDS SUMMARYLab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Instrument ID: HP 5840 GC Column ID: DB-5

COMPOUND	RT	RT WINDOW		CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	ID
		FROM	TO					
alpha-BHC								
beta-BHC								
delta-BHC								
gamma-BHC								
Heptaclor								
Aldrin								
Hept. Epoxide								
Endosulfan I								
Dieldrin								
4,4'-DDE								
Endrin								
Endosulfan II								
4,4'-DDD								
Endo. Sulfate								
4,4'-DDT								
Methoxychlor								
Endrin Ketone								
a. Chlordane								
g. Chlordane								
Toxaphene								
Aroclor-1016								
Aroclor-1221								
Aroclor-1232								
Aroclor-1242								
Aroclor-1248		15.0	30.0	1.0				
Aroclor-1254								
Aroclor-1260								

Under QNT Y/N: enter Y if quantitation was performed, N if not performed. %D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criterion.

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page ____ of ____

FORM IX PEST

10/86

9
PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: Occidental Chemical Corp.

Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Instrument ID: HP 5840

GC Column ID: DB-5

DATE(S) OF ANALYSIS	FROM: <u>12/21/87</u>
TIME(S) OF ANALYSIS	TO: <u>12/28/87</u>
DATE(S) OF ANALYSIS	FROM: _____
TIME(S) OF ANALYSIS	TO: _____

DATE OF ANALYSIS	<u>12/23/87</u>
TIME OF ANALYSIS	<u>0700</u>
LAB SAMPLE ID	<u>Analy 124</u>
(STANDARD)	

COMPOUND	RT	RT WINDOW		CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	FRC	001 0781
		FROM	TO						
alpha-BHC									
beta-BHC									
delta-BHC									
gamma-BHC									
Heptaclor									
Aldrin									
Hept. Epoxide									
Endosulfan I									
Dieldrin									
4,4'-DDE									
Endrin									
Endosulfan II									
4,4'-DDD									
Endo.Sulfate									
4,4'-DDT									
Methoxychlor									
Endrin Ketone									
a. Chlordane									
g. Chlordane									
Toxaphene									
Aroclor-1016									
Aroclor-1221									
Aroclor-1232									
Aroclor-1242									
Aroclor-1248		15.0		30.0		1.0			
Aroclor-1254									
Aroclor-1260									y

Under QNT Y/N: enter Y if quantitation was performed, N if not performed.
 %D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criterion.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition.

page ____ of ____

FORM IX PEST

10/86

9
PESTICIDE/PCB STANDARDS SUMMARYLab Name: Occidental Chemical Corp.

Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Instrument ID: HP 5840GC Column ID: DB-5

DATE(S) OF ANALYSIS	FROM:	<u>12/21/87</u>	DATE OF ANALYSIS	<u>12/19/87</u>
	TO:	<u>12/28/87</u>	TIME OF ANALYSIS	<u>1740</u>
TIME(S) OF ANALYSIS	FROM:		LAB SAMPLE ID	<u>Aroclor 12</u>
	TO:		(STANDARD)	

COMPOUND	RT	RT WINDOW		CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	HRC
		FROM	TO					
alpha-BHC								
beta-BHC								
delta-BHC								
gamma-BHC								
Heptaclor								
Aldrin								
Hept. Epoxide								
Endosulfan I								
Dieldrin								
4,4'-DDE								
Endrin								
Endosulfan II								
4,4'-DDD								
Endo. Sulfate								
4,4'-DDT								
Methoxychlor								
Endrin Ketone								
a. Chlordane								
g. Chlordane								
Toxaphene								
Aroclor-1016								
Aroclor-1221								
Aroclor-1232								
Aroclor-1242								
Aroclor-1248		15.0	30.0	1.0				y
Aroclor-1254								
Aroclor-1260								

Under QNT Y/N: enter Y if quantitation was performed, N if not performed. tD must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criterion.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and tD. Identification of such analytes is based primarily on pattern recognition.

9
PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: Occidental Chemical Corp. Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Instrument ID: HP 5840

GC Column ID: DB-5

	DATE(S) OF ANALYSIS FROM: 12/21/87 TO: 12/28/87			DATE OF ANALYSIS 12/23/87 TIME OF ANALYSIS 1300 LAB SAMPLE ID (STANDARD)	
COMPOUND	RT	RT WINDOW FROM	CALIBRATION FACTOR	RT	CALIBRATION FACTOR QNT Y/N
alpha-BHC					
beta-BHC					
delta-BHC					
gamma-BHC					
Heptaclor					
Aldrin					
Hept. Epoxide					
Endosulfan I					
Dieldrin					
4,4'-DDE					
Endrin					
Endosulfan II					
4,4'-DDD					
Endo. Sulfate					
4,4'-DDT					
Methoxychlor					
Endrin Ketone					
a. Chlordane					
g. Chlordane					
Toxaphene					
Aroclor-1016					
Aroclor-1221					
Aroclor-1232					
Aroclor-1242					
Aroclor-1248	15.0	30.0	1.0		y
Aroclor-1254					
Aroclor-1260					

Under QNT Y/N: enter Y if quantitation was performed, N if not performed.
 tD must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

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For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and tD. Identification of such analytes is based primarily on pattern recognition

9
PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Instrument ID: HP 5840 GC Column ID: DB-5

DATE(S) OF ANALYSIS	FROM: <u>12/21/87</u>	TO: <u>12/28/87</u>	DATE OF ANALYSIS <u>12/31/87</u>
TIME(S) OF ANALYSIS	FROM: <u>00:00</u>	TO: <u>00:00</u>	TIME OF ANALYSIS <u>00:09</u>
LAB SAMPLE ID <u>Aroclor 1248</u> (STANDARD)			

COMPOUND	RT	RT WINDOW		CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	ID
		FROM	TO					
alpha-BHC								
beta-BHC								
delta-BHC								
gamma-BHC								
Heptaclor								
Aldrin								
Hept. Epoxide								
Endosulfan I								
Dieldrin								
4,4'-DDE								
Endrin								
Endosulfan II								
4,4'-DDD								
Endo.Sulfate								
4,4'-DDT								
Methoxychlor								
Endrin Ketone								
a. Chlordane								
g. Chlordane								
Toxaphene								
Aroclor-1016								
Aroclor-1221								
Aroclor-1232								
Aroclor-1242								
Aroclor-1248		15.0	30.0	1.0			y	
Aroclor-1254								
Aroclor-1260								

Under QNT Y/N: enter Y if quantitation was performed, N if not performed.
 &D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and &D. Identification of such analytes is based primarily on pattern recognition

2F
SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: Occidental Chemical Corp. Contract: _____
 Job Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____
 Level: (low/med) Med

EPA SAMPLE NO.	S1 (C66) #	OTHER
01 S-215 AA CD1A1	55	
02 S-216 BB CD1A1	99	
03 S-217 CC CD1A1	97	
04 S-218 DD CD1A1	97	
05 S-219 EE CD1A1	110	
06 S-220 FF CD1A1	94	
07 S-221 GG CD1A1	73	
08 S-222 HH CD1A1	87	
09 S-223 II CD1A1	82	
10 S-224 JJ CD1A1	98	
11 S-225 KK CD1A1	95	
12 S-226 LL CD1A1	100	
13 S-227 MM CD1A1	97	
14 S-228 NN CD1A1	72	
15 S-229 OO CD1A1	102	
16 S-230 PP CD1A1	110	
17 S-231 QQ CD1A1	100	
18 S-232 FF CD1A1	100	
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		

ADVISORY
QC LIMITS
(24-154)

S1 (C66) = Hexachlorobenzene

* Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

page ____ of ____

FORM II PEST-2

10/8

HRC 001 0785

4C
PESTICIDE METHOD BLANK SUMMARY

Lab Name: Occidental Chemical Corp. Contract: _____
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____
 EPA Sample No. for Method Blank: _____ Lab Sample ID: 87-1659
 Matrix: (soil/water) Soil Level: (low/med) Med Lab File ID: _____

Date Extracted: 12/21/87 Extraction: (SepF/Cont/Sonc) Sonc
 Date Analyzed (1): 12/25/87 Date Analyzed (2): _____
 Time Analyzed (1): 04:16 Time Analyzed (2): _____
 Instrument ID (1): HP 5840 Instrument ID (2): _____
 GC Column ID (1): DB-5 GC Column ID (2): _____

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID (1)	DATE ANALYZED 1	LAB SAMPLE ID (2)	DATE ANALYZED 2
01	<u>S-232FBct1A1</u>	<u>87-1659</u>	<u>12/25/87</u>	
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS: _____

page of

FORM IV PEST

10/86

HRC 001 0786

10
PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

Lab Name: Occidental Chemical Corp. Contract: _____
Lab Code: 87-1642 Case No.: _____ SAS No.: _____ SDG No.: _____
GC Column ID (1): DB-5 GC Column ID (2): _____
Instrument ID (1): HP 5840 Instrument ID (2): _____
Lab Sample ID (1): 87-1642 Lab Sample ID (2): _____
Lab File ID: _____ (only if confirmed by GC/MS)

PESTICIDE/PCB	RETENTION TIME	RT WINDOW OF STANDARD FROM TO	QUANT? (Y/N)	GC/MS? (Y/N)
01 <u>Aroclor 1248</u>	Column 1 _____	_____ <u>15.0</u> _____ <u>30.0</u> _____	Y	-
02	Column 2 _____	_____	-	-
03 _____	Column 1 _____	_____	-	-
04	Column 2 _____	_____	-	-
05 _____	Column 1 _____	_____	-	-
06	Column 2 _____	_____	-	-
07 _____	Column 1 _____	_____	-	-
08	Column 2 _____	_____	-	-
09 _____	Column 1 _____	_____	-	-
10	Column 2 _____	_____	-	-
11 _____	Column 1 _____	_____	-	-
12	Column 2 _____	_____	-	-

Comments: _____

HRC 001 0787

10
PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

Lab Name: Occidental Chemical Corp. Contract: _____
Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____
GC Column ID (1): DB-5 GC Column ID (2): _____
Instrument ID (1): HP 5840 Instrument ID (2): _____
Lab Sample ID (1): 87-1643 Lab Sample ID (2): _____
Lab File ID: _____ (only if confirmed by GC/MS)

PESTICIDE/PCB	RETENTION TIME	RT WINDOW OF STANDARD FROM TO	QUANT? (Y/N)	GC/MS? (Y/N)
01 <u>Aroclor 1248</u>	Column 1 _____	<u>15.0</u> <u>30.0</u>	Y	-
02	Column 2 _____	_____ _____	-	-
03 _____	Column 1 _____	_____ _____	-	-
04	Column 2 _____	_____ _____	-	-
05 _____	Column 1 _____	_____ _____	-	-
06	Column 2 _____	_____ _____	-	-
07 _____	Column 1 _____	_____ _____	-	-
08	Column 2 _____	_____ _____	-	-
09 _____	Column 1 _____	_____ _____	-	-
10	Column 2 _____	_____ _____	-	-
11 _____	Column 1 _____	_____ _____	-	-
12	Column 2 _____	_____ _____	-	-

Comments: _____

HRC 001 0788

10
PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

Lab Name: Occidental Chemical Corp. Contract: _____
Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____
GC Column ID (1): DB-5 GC Column ID (2): _____
Instrument ID (1): HP 5840 Instrument ID (2): _____
Lab Sample ID (1): 57-1644 Lab Sample ID (2): _____
Lab File ID: _____ (only if confirmed by GC/MS)

PESTICIDE/PCB	RETENTION TIME	RT WINDOW OF STANDARD FROM _____ TO _____	QUANT? (Y/N)	GC/MS? (Y/N)
01 <u>Aroclor 1248</u>	Column 1 _____	15.0 _____ 30.0	Y	-
02	Column 2 _____	_____	-	-
03 _____	Column 1 _____	_____	-	-
04	Column 2 _____	_____	-	-
05 _____	Column 1 _____	_____	-	-
06	Column 2 _____	_____	-	-
07 _____	Column 1 _____	_____	-	-
08	Column 2 _____	_____	-	-
09 _____	Column 1 _____	_____	-	-
10	Column 2 _____	_____	-	-
11 _____	Column 1 _____	_____	-	-
12	Column 2 _____	_____	-	-

Comments: _____

HRC 001 0789

10
PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

Lab Name: Occidental Chemical Corp. Contract: _____
Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____
GC Column ID (1): DB-5 GC Column ID (2): _____
Instrument ID (1): HP 5840 Instrument ID (2): _____
Lab Sample ID (1): 87-1645 Lab Sample ID (2): _____
Lab File ID: _____ (only if confirmed by GC/MS)

PESTICIDE/PCB	RETENTION TIME	RT WINDOW OF STANDARD FROM TO	QUANT? (Y/N)	GC/MS? (Y/N)
01 <u>Aroclor 1248</u>	Column 1 _____	15.0 30.0	Y	—
02	Column 2 _____	_____	—	—
03	Column 1 _____	_____	—	—
04	Column 2 _____	_____	—	—
05	Column 1 _____	_____	—	—
06	Column 2 _____	_____	—	—
07	Column 1 _____	_____	—	—
08	Column 2 _____	_____	—	—
09	Column 1 _____	_____	—	—
10	Column 2 _____	_____	—	—
11	Column 1 _____	_____	—	—
12	Column 2 _____	_____	—	—

Comments: _____

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10
PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

Lab Name: Occidental Chemical Corp. Contract: _____ S-219 EEE et al

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP 5840 Instrument ID (2): _____

Lab Sample ID (1): 87-1646 Lab Sample ID (2): _____

Lab File ID: _____ (only if confirmed by GC/MS)

PESTICIDE/PCB	RETENTION TIME	RT WINDOW OF STANDARD FROM TO	QUANT? (Y/N)	GC/MS? (Y/N)
01 <u>Aroclor 1248</u>	Column 1 _____	_____ 15.0 30.0 _____	Y	—
02	Column 2 _____	_____	—	—
03	Column 1 _____	_____	—	—
04	Column 2 _____	_____	—	—
05	Column 1 _____	_____	—	—
06	Column 2 _____	_____	—	—
07	Column 1 _____	_____	—	—
08	Column 2 _____	_____	—	—
09	Column 1 _____	_____	—	—
10	Column 2 _____	_____	—	—
11	Column 1 _____	_____	—	—
12	Column 2 _____	_____	—	—

Comments: _____

HRC 001 0791

10
PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

Lab Name: Occidental Chemical Corp. Contract: _____
Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____
GC Column ID (1): DB-5 GC Column ID (2): _____
Instrument ID (1): HP 5840 Instrument ID (2): _____
Lab Sample ID (1): 87-1647 Lab Sample ID (2): _____
Lab File ID: _____ (only if confirmed by GC/MS)

PESTICIDE/PCB	RETENTION TIME	RT WINDOW OF STANDARD FROM	RT WINDOW OF STANDARD TO	QUANT? (Y/N)	GC/MS? (Y/N)
01 <u>Aroclor 1248</u>	Column 1 _____	_____	<u>15.0</u> <u>30.0</u>	Y	—
02	Column 2 _____	_____	_____	—	—
03	Column 1 _____	_____	_____	—	—
04	Column 2 _____	_____	_____	—	—
05	Column 1 _____	_____	_____	—	—
06	Column 2 _____	_____	_____	—	—
07	Column 1 _____	_____	_____	—	—
08	Column 2 _____	_____	_____	—	—
09	Column 1 _____	_____	_____	—	—
10	Column 2 _____	_____	_____	—	—
11	Column 1 _____	_____	_____	—	—
12	Column 2 _____	_____	_____	—	—

Comments: _____

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10
PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

Lab Name: Occidental Chemical Corp. Contract: _____
Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____
GC Column ID (1): DB-5 GC Column ID (2): _____
Instrument ID (1): HP 5840 Instrument ID (2): _____
Lab Sample ID (1): 87-1648 Lab Sample ID (2): _____
Lab File ID: _____ (only if confirmed by GC/MS)

PESTICIDE/PCB	RETENTION TIME	RT WINDOW OF STANDARD FROM	TO	QUANT? (Y/N)	GC/MS? (Y/N)
01 <u>Aroclor 1248</u>	Column 1 _____	15.0	30.0	Y	-
02	Column 2 _____	_____	_____	-	-
03	Column 1 _____	_____	_____	-	-
04	Column 2 _____	_____	_____	-	-
05	Column 1 _____	_____	_____	-	-
06	Column 2 _____	_____	_____	-	-
07	Column 1 _____	_____	_____	-	-
08	Column 2 _____	_____	_____	-	-
09	Column 1 _____	_____	_____	-	-
10	Column 2 _____	_____	_____	-	-
11	Column 1 _____	_____	_____	-	-
12	Column 2 _____	_____	_____	-	-

Comments: _____

OCCIDENTAL CHEMICAL CORPORATION
RUCO POLYMER CORPORATION SITE
HICKSVILLE, NEW YORK

Additional Soil Investigations in
the Vicinity of the Pilot Plant

Since June 1983, several phases of soil sampling have been completed to define the extent of PCB contaminated soil in the vicinity of the Pilot Plant at the Ruco Polymer Corporation site. The occurrence of the PCB's was reportedly due to a spill which affected a 6 foot by 6 foot area. The contamination was apparently spread over a much wider area, possibly due to storm-water runoff and sediment transport. The areal extent of contamination which may need remediation also increased due to a lowering of the remedial action standard from 50 mg/kg (milligrams per kilogram) to 10 mg/kg.

The most recent soil samples were taken on December 16 through 17, 1987. These samples were analyzed at the Occidental Chemical Corporation Laboratory on Grand Island, New York. All previous analytical work was performed at Environmental Testing and Certification (ETC) in Edison, New Jersey. All samples have been obtained by personnel of Leggette, Brashears & Graham, Inc. (LBG).

Previous sampling and analysis at the site has shown that, with the exception of the spill area and the former storm drain, the contamination is confined to the soils immediately below the asphalt or within the top one foot of soil in unpaved areas. In the former open, unlined drain, PCB's occur in the drain bed several feet below grade.

The extent of known contamination is shown on figure 1 and the analytical report is attached. The area of contamination has been largely defined at this time. A final round of samples will be obtained in February, 1988, and a remedial action plan will be prepared for review in

HPC
001
0794

10
PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

Lab Name: Occidental Chemical Corp. Contract: _____
Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____
GC Column ID (1): DB-5 GC Column ID (2): _____
Instrument ID (1): HP 5840 Instrument ID (2): _____
Lab Sample ID (1): 87-1649 Lab Sample ID (2): _____
Lab File ID: _____ (only if confirmed by GC/MS)

PESTICIDE/PCB	RETENTION TIME	RT WINDOW OF STANDARD FROM _____ TO _____	QUANT? (Y/N)	GC/MS? (Y/N)
01 <u>Aroclor 1248</u>	Column 1 _____	15.0 _____ 30.0	Y	-
02	Column 2 _____	_____	-	-
03	Column 1 _____	_____	-	-
04	Column 2 _____	_____	-	-
05	Column 1 _____	_____	-	-
06	Column 2 _____	_____	-	-
07	Column 1 _____	_____	-	-
08	Column 2 _____	_____	-	-
09	Column 1 _____	_____	-	-
10	Column 2 _____	_____	-	-
11	Column 1 _____	_____	-	-
12	Column 2 _____	_____	-	-

Comments: _____

10
PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

Lab Name: Occidental Chemical Corp. Contract: _____

S-223 II Oct/41

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____Instrument ID (1): HP 5840 Instrument ID (2): _____Lab Sample ID (1): 87-1650 Lab Sample ID (2): _____

Lab File ID: _____ (only if confirmed by GC/MS)

PESTICIDE/PCB	RETENTION TIME	RT WINDOW OF STANDARD FROM	TO	QUANT? (Y/N)	GC/MS? (Y/N)
01 <u>Aroclor 1248</u>	Column 1 _____	_____	15.0 30.0	Y	-
02	Column 2 _____	_____	_____	-	-
03 _____	Column 1 _____	_____	_____	-	-
04	Column 2 _____	_____	_____	-	-
05 _____	Column 1 _____	_____	_____	-	-
06	Column 2 _____	_____	_____	-	-
07 _____	Column 1 _____	_____	_____	-	-
08	Column 2 _____	_____	_____	-	-
09 _____	Column 1 _____	_____	_____	-	-
10	Column 2 _____	_____	_____	-	-
11 _____	Column 1 _____	_____	_____	-	-
12	Column 2 _____	_____	_____	-	-

Comments: _____

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PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

Lab Name: Occidental Chemical Corp. Contract: _____

S-224JJ 001A1

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____Instrument ID (1): HP 5840 Instrument ID (2): _____Lab Sample ID (1): 87-1651 Lab Sample ID (2): _____

Lab File ID: _____ (only if confirmed by GC/MS)

PESTICIDE/PCB	RETENTION TIME	RT WINDOW OF STANDARD FROM	TO	QUANT? (Y/N)	GC/MS? (Y/N)
01 <u>Aroclor 1248</u>	Column 1 _____	15.0	30.0	Y	-
02	Column 2 _____	_____	_____	-	-
03	Column 1 _____	_____	_____	-	-
04	Column 2 _____	_____	_____	-	-
05	Column 1 _____	_____	_____	-	-
06	Column 2 _____	_____	_____	-	-
07	Column 1 _____	_____	_____	-	-
08	Column 2 _____	_____	_____	-	-
09	Column 1 _____	_____	_____	-	-
10	Column 2 _____	_____	_____	-	-
11	Column 1 _____	_____	_____	-	-
12	Column 2 _____	_____	_____	-	-

Comments: _____

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10
PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

Lab Name: Occidental Chemical Corp. Contract: _____ S-225 KK Oci(1)

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____

Instrument ID (1): HP 5840 Instrument ID (2): _____

Lab Sample ID (1): 87-1652 Lab Sample ID (2): _____

Lab File ID: _____ (only if confirmed by GC/MS)

PESTICIDE/PCB	RETENTION TIME	RT WINDOW OF STANDARD FROM	TO	QUANT? (Y/N)	GC/MS? (Y/N)
01 <u>Aroclor 1248</u>	Column 1 _____	15.0	30.0	Y	-
02	Column 2 _____	_____	_____	-	-
03 _____	Column 1 _____	_____	_____	-	-
04	Column 2 _____	_____	_____	-	-
05 _____	Column 1 _____	_____	_____	-	-
06	Column 2 _____	_____	_____	-	-
07 _____	Column 1 _____	_____	_____	-	-
08	Column 2 _____	_____	_____	-	-
09 _____	Column 1 _____	_____	_____	-	-
10	Column 2 _____	_____	_____	-	-
11 _____	Column 1 _____	_____	_____	-	-
12	Column 2 _____	_____	_____	-	-

Comments: _____

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10
PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

Lab Name: Occidental Chemical Corp. Contract: _____ S-226 LL GD141
Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____
GC Column ID (1): DB-5 GC Column ID (2): _____
Instrument ID (1): HP 5840 Instrument ID (2): _____
Lab Sample ID (1): 87-1653 Lab Sample ID (2): _____
Lab File ID: _____ (only if confirmed by GC/MS)

PESTICIDE/PCB	RETENTION TIME	RT WINDOW OF STANDARD FROM TO	QUANT? (Y/N)	GC/MS? (Y/N)
01 <u>Aroclor 1248</u>	Column 1 _____	_____ <u>15.0</u> ____ <u>30.0</u> _____	Y	-
02	Column 2 _____	_____	-	-
03 _____	Column 1 _____	_____	-	-
04	Column 2 _____	_____	-	-
05 _____	Column 1 _____	_____	-	-
06	Column 2 _____	_____	-	-
07 _____	Column 1 _____	_____	-	-
08	Column 2 _____	_____	-	-
09 _____	Column 1 _____	_____	-	-
10	Column 2 _____	_____	-	-
11 _____	Column 1 _____	_____	-	-
12	Column 2 _____	_____	-	-

Comments: _____

HRC 001 0799

10
PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

Lab Name: Occidental Chemical Corp. Contract: S-227 MN 001A1
Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____
GC Column ID (1): DB-5 GC Column ID (2): _____
Instrument ID (1): HP 5840 Instrument ID (2): _____
Lab Sample ID (1): 87-1654 Lab Sample ID (2): _____
Lab File ID: _____ (only if confirmed by GC/MS)

PESTICIDE/PCB	RETENTION TIME	RT WINDOW OF STANDARD FROM _____ TO _____	QUANT? (Y/N)	GC/MS? (Y/N)
01 <u>Aroclor 1248</u>	Column 1 _____	15.0 30.0	Y	-
02	Column 2 _____	_____	-	-
03	Column 1 _____	_____	-	-
04	Column 2 _____	_____	-	-
05	Column 1 _____	_____	-	-
06	Column 2 _____	_____	-	-
07	Column 1 _____	_____	-	-
08	Column 2 _____	_____	-	-
09	Column 1 _____	_____	-	-
10	Column 2 _____	_____	-	-
11	Column 1 _____	_____	-	-
12	Column 2 _____	_____	-	-

Comments: _____

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10
PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

Lab Name: Occidental Chemical Corp. Contract: _____

S-228114cc241

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____Instrument ID (1): HP 5840 Instrument ID (2): _____Lab Sample ID (1): 87-1655 Lab Sample ID (2): _____

Lab File ID: _____ (only if confirmed by GC/MS)

PESTICIDE/PCB	RETENTION TIME	RT WINDOW OF STANDARD FROM	TO	QUANT? (Y/N)	GC/MS? (Y/N)
01 <u>Aroclor 1248</u>	Column 1 _____	15.0	30.0	Y	-
02	Column 2 _____	_____	_____	-	-
03 _____	Column 1 _____	_____	_____	-	-
04	Column 2 _____	_____	_____	-	-
05 _____	Column 1 _____	_____	_____	-	-
06	Column 2 _____	_____	_____	-	-
07 _____	Column 1 _____	_____	_____	-	-
08	Column 2 _____	_____	_____	-	-
09 _____	Column 1 _____	_____	_____	-	-
10	Column 2 _____	_____	_____	-	-
11 _____	Column 1 _____	_____	_____	-	-
12	Column 2 _____	_____	_____	-	-

Comments: _____

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10
PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

Lab Name: Occidental Chemical Corp. Contract: _____
Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____
GC Column ID (1): DB-5 GC Column ID (2): _____
Instrument ID (1): HP 5840 Instrument ID (2): _____
Lab Sample ID (1): 87-1656 Lab Sample ID (2): _____
Lab File ID: _____ (only if confirmed by GC/MS)

PESTICIDE/PCB	RETENTION TIME	RT WINDOW OF STANDARD FROM TO	QUANT? (Y/N)	GC/MS? (Y/N)
01 <u>Aroclor 1248</u>	Column 1 _____	15.0 30.0	Y	-
02	Column 2 _____	_____	-	-
03 _____	Column 1 _____	_____	-	-
04	Column 2 _____	_____	-	-
05 _____	Column 1 _____	_____	-	-
06	Column 2 _____	_____	-	-
07 _____	Column 1 _____	_____	-	-
08	Column 2 _____	_____	-	-
09 _____	Column 1 _____	_____	-	-
10	Column 2 _____	_____	-	-
11 _____	Column 1 _____	_____	-	-
12	Column 2 _____	_____	-	-

Comments: _____

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HRC 001 0802

10
PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

Lab Name: Occidental Chemical Corp. Contract: _____
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____
 GC Column ID (1): DB-5 GC Column ID (2): _____
 Instrument ID (1): HP 5840 Instrument ID (2): _____
 Lab Sample ID (1): 87-1657 Lab Sample ID (2): _____
 Lab File ID: _____ (only if confirmed by GC/MS)

PESTICIDE/PCB	RETENTION TIME	RT WINDOW OF STANDARD FROM TO	QUANT? (Y/N)	GC/MS? (Y/N)
01 <u>Aroclor 1248</u>	Column 1 _____	_____ 15.0 30.0 _____	Y	-
02	Column 2 _____	_____	-	-
03	Column 1 _____	_____	-	-
04	Column 2 _____	_____	-	-
05	Column 1 _____	_____	-	-
06	Column 2 _____	_____	-	-
07	Column 1 _____	_____	-	-
08	Column 2 _____	_____	-	-
09	Column 1 _____	_____	-	-
10	Column 2 _____	_____	-	-
11	Column 1 _____	_____	-	-
12	Column 2 _____	_____	-	-

Comments: _____

HRC 001 0803

10
PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

Lab Name: Occidental Chemical Corp. Contract: _____

S-23/QQ60141

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-5 GC Column ID (2): _____Instrument ID (1): HP 5840 Instrument ID (2): _____Lab Sample ID (1): 87-1658 Lab Sample ID (2): _____

Lab File ID: _____ (only if confirmed by GC/MS)

PESTICIDE/PCB	RETENTION TIME	RT WINDOW OF STANDARD FROM	TO	QUANT? (Y/N)	GC/MS? (Y/N)
01 <u>Aroclor 1248</u>	Column 1 _____	15.0	30.0	Y	-
02	Column 2 _____	_____	_____	-	-
03 _____	Column 1 _____	_____	_____	-	-
04	Column 2 _____	_____	_____	-	-
05 _____	Column 1 _____	_____	_____	-	-
06	Column 2 _____	_____	_____	-	-
07 _____	Column 1 _____	_____	_____	-	-
08	Column 2 _____	_____	_____	-	-
09 _____	Column 1 _____	_____	_____	-	-
10	Column 2 _____	_____	_____	-	-
11 _____	Column 1 _____	_____	_____	-	-
12	Column 2 _____	_____	_____	-	-

Comments: _____

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10
PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

Lab Name: Occidental Chemical Corp. Contract: _____
Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____
GC Column ID (1): DB-5 GC Column ID (2): _____
Instrument ID (1): HP 5840 Instrument ID (2): _____
Lab Sample ID (1): 87-1659 Lab Sample ID (2): _____
Lab File ID: _____ (only if confirmed by GC/MS)

PESTICIDE/PCB	RETENTION TIME	RT WINDOW OF STANDARD FROM _____ TO _____	QUANT? (Y/N)	GC/MS? (Y/N)
01 <u>Aroclor 1248</u>	Column 1 _____	_____ 15.0 30.0 _____	-	-
02	Column 2 _____	_____ _____	-	-
03 _____	Column 1 _____	_____ _____	-	-
04	Column 2 _____	_____ _____	-	-
05 _____	Column 1 _____	_____ _____	-	-
06	Column 2 _____	_____ _____	-	-
07 _____	Column 1 _____	_____ _____	-	-
08	Column 2 _____	_____ _____	-	-
09 _____	Column 1 _____	_____ _____	-	-
10	Column 2 _____	_____ _____	-	-
11 _____	Column 1 _____	_____ _____	-	-
12	Column 2 _____	_____ _____	-	-

Comments: _____

page ____ of ____

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1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: Occidental Chemical Corp. Contract: _____

S-215 AA & 1A1

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 87-1642

Sample wt/vol: 1.07 (g/mL) 10 Lab File ID: _____

Level: (low/med) Med Date Received: 12/18/87

% Moisture: not dec. dec. X Date Extracted: 12/21/87

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 12/23/87

GPC Cleanup: (Y/N) N pH: ---- Dilution Factor: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/g	Q
319-84-6-----	alpha-BHC			
319-85-7-----	beta-BHC			
319-86-8-----	delta-BHC			
58-89-9-----	gamma-BHC (Lindane)			
76-44-8-----	Heptachlor			
309-00-2-----	Aldrin			
1024-57-3-----	Heptachlor epoxide			
959-98-8-----	Endosulfan I			
60-57-1-----	Dieldrin			
72-55-9-----	4,4'-DDE			
72-20-8-----	Endrin			
33213-65-9-----	Endosulfan II			
72-54-8-----	4,4'-DDD			
1031-07-8-----	Endosulfan sulfate			
50-29-3-----	4,4'-DDT			
72-43-5-----	Methoxychlor			
53494-70-5-----	Endrin ketone			
5103-71-9-----	alpha-Chlordane			
5103-74-2-----	gamma-Chlordane			
8001-35-2-----	Toxaphene			
12674-11-2-----	Aroclor-1016			
11104-28-2-----	Aroclor-1221			
11141-16-5-----	Aroclor-1232			
53469-22-9-----	Aroclor-1242			
12672-29-6-----	Aroclor-1248			
11097-69-1-----	Aroclor-1254		19.0	
11096-82-5-----	Aroclor-1260			

HRC 001 0806

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-216BB001A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 97-1643

Sample wt/vol: 1.16 (g/mL) 10 Lab File ID: _____

Level: (low/med) Med Date Received: 12/18/87

% Moisture: not dec. dec. X Date Extracted: 12/21/87

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 12/23/87

GPC Cleanup: (Y/N) N pH: ---- Dilution Factor: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>ug/g</u>	Q
319-84-6-----	alpha-BHC		
319-85-7-----	beta-BHC		
319-86-8-----	delta-BHC		
58-89-9-----	gamma-BHC (Lindane)		
76-44-8-----	Heptachlor		
309-00-2-----	Aldrin		
1024-57-3-----	Heptachlor epoxide		
959-98-8-----	Endosulfan I		
60-57-1-----	Dieldrin		
72-55-9-----	4,4'-DDE		
72-20-8-----	Endrin		
33213-65-9-----	Endosulfan II		
72-54-8-----	4,4'-DDD		
1031-07-8-----	Endosulfan sulfate		
50-29-3-----	4,4'-DDT		
72-43-5-----	Methoxychlor		
53494-70-5-----	Endrin ketone		
5103-71-9-----	alpha-Chlordane		
5103-74-2-----	gamma-Chlordane		
8001-35-2-----	Toxaphene		
12674-11-2-----	Aroclor-1016		
11104-28-2-----	Aroclor-1221		
11141-16-5-----	Aroclor-1232		
53469-22-9-----	Aroclor-1242		
12672-29-6-----	Aroclor-1248		
11097-69-1-----	Aroclor-1254		
11096-82-5-----	Aroclor-1260	14.5	

HRC 001 0807

ID
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-217 CEC A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil

Lab Sample ID: 87-1644

Sample wt/vol: 1.25 (g/mL) 10

Lab File ID: _____

Level: (low/med) Med

Date Received: 12/18/87

% Moisture: not dec. _____ dec. X

Date Extracted: 12/21/87

Extraction: (SepF/Cont/Sonc) Sonc

Date Analyzed: 12/23/87

GPC Cleanup: (Y/N) N pH: ----

Dilution Factor: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6-----	alpha-BHC		
319-85-7-----	beta-BHC		
319-86-8-----	delta-BHC		
58-89-9-----	gamma-BHC(Lindane)		
76-44-8-----	Heptachlor		
309-00-2-----	Aldrin		
1024-57-3-----	Heptachlor epoxide		
959-98-8-----	Endosulfan I		
60-57-1-----	Dieldrin		
72-55-9-----	4,4'-DDE		
72-20-8-----	Endrin		
33213-65-9-----	Endosulfan II		
72-54-8-----	4,4'-DDD		
1031-07-8-----	Endosulfan sulfate		
50-29-3-----	4,4'-DDT		
72-43-5-----	Methoxychlor		
53494-70-5-----	Endrin ketone		
5103-71-9-----	alpha-Chlordane		
5103-74-2-----	gamma-Chlordane		
8001-35-2-----	Toxaphene		
12674-11-2-----	Aroclor-1016		
11104-28-2-----	Aroclor-1221		
11141-16-5-----	Aroclor-1232		
53469-22-9-----	Aroclor-1242		
12672-29-6-----	Aroclor-1248		
11097-69-1-----	Aroclor-1254		
11096-82-5-----	Aroclor-1260		

HRC 001 0808

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: Occidental Chemical Corp. Contract: _____

S-218 DD Oct 1A1

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 87-1645

Sample wt/vol: 1.0 (g/mL) 10 Lab File ID: _____

Level: (low/med) Med Date Received: 12/18/87

% Moisture: not dec. _____ dec. X Date Extracted: 12/21/87

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 12/23/87

GPC Cleanup: (Y/N) N pH: ---- Dilution Factor: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>ug/g</u>	Q	HRC	001	0809
319-84-6-----	alpha-BHC					
319-85-7-----	beta-BHC					
319-86-8-----	delta-BHC					
58-89-9-----	gamma-BHC (Lindane)					
76-44-8-----	Heptachlor					
309-00-2-----	Aldrin					
1024-57-3-----	Heptachlor epoxide					
959-98-8-----	Endosulfan I					
60-57-1-----	Dieldrin					
72-55-9-----	4,4'-DDE					
72-20-8-----	Endrin					
33213-65-9-----	Endosulfan II					
72-54-8-----	4,4'-DDD					
1031-07-8-----	Endosulfan sulfate					
50-29-3-----	4,4'-DDT					
72-43-5-----	Methoxychlor					
53494-70-5-----	Endrin ketone					
5103-71-9-----	alpha-Chlordane					
5103-74-2-----	gamma-Chlordane					
8001-35-2-----	Toxaphene					
12674-11-2-----	Aroclor-1016					
11104-28-2-----	Aroclor-1221					
11141-16-5-----	Aroclor-1232					
53469-22-9-----	Aroclor-1242					
12672-29-6-----	Aroclor-1248					
11097-69-1-----	Aroclor-1254					
11096-82-5-----	Aroclor-1260					
			12.9			

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: Occidental Chemical Corp. Contract: _____

S-219EE 001.41

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 87-1646

Sample wt/vol: 1.19 (g/mL) 10 Lab File ID: _____

Level: (low/med) Med Date Received: 12/18/87

% Moisture: not dec. _____ dec. X Date Extracted: 12/21/87

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 12/23/87

GPC Cleanup: (Y/N) N pH: --- Dilution Factor: 1:10

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>ug/g</u>	Q
319-84-6-----	alpha-BHC		
319-85-7-----	beta-BHC		
319-86-8-----	delta-BHC		
58-89-9-----	gamma-BHC(Lindane)		
76-44-8-----	Heptachlor		
309-00-2-----	Aldrin		
1024-57-3-----	Heptachlor epoxide		
959-98-8-----	Endosulfan I		
60-57-1-----	Dieldrin		
72-55-9-----	4,4'-DDE		
72-20-8-----	Endrin		
33213-65-9-----	Endosulfan II		
72-54-8-----	4,4'-DDD		
1031-07-8-----	Endosulfan sulfate		
50-29-3-----	4,4'-DDT		
72-43-5-----	Methoxychlor		
53494-70-5-----	Endrin ketone		
5103-71-9-----	alpha-Chlordane		
5103-74-2-----	gamma-Chlordane		
8001-35-2-----	Toxaphene		
12674-11-2-----	Aroclor-1016		
11104-28-2-----	Aroclor-1221		
11141-16-5-----	Aroclor-1232		
53469-22-9-----	Aroclor-1242		
12672-29-6-----	Aroclor-1248		
11097-69-1-----	Aroclor-1254		
11096-82-5-----	Aroclor-1260		
		10.4	

HRC 001 0810

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-224 FF DCIAI

Lab Name: Occidental Chemical Corp.

Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil

Lab Sample ID: 87-1647

Sample wt/vol: 1.06 (g/mL) 10

Lab File ID: _____

Level: (low/med) Med

Date Received: 12/18/87

* Moisture: not dec. dec. X

Date Extracted: 12/21/87

Extraction: (SepF/Cont/Sonc) Sonc

Date Analyzed: 12/23/87

GPC Cleanup: (Y/N) N pH: ----

Dilution Factor: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6-----	alpha-BHC		
319-85-7-----	beta-BHC		
319-86-8-----	delta-BHC		
58-89-9-----	gamma-BHC (Lindane)		
76-44-8-----	Heptachlor		
309-00-2-----	Aldrin		
1024-57-3-----	Heptachlor epoxide		
959-98-8-----	Endosulfan I		
60-57-1-----	Dieldrin		
72-55-9-----	4,4'-DDE		
72-20-8-----	Endrin		
33213-65-9-----	Endosulfan II		
72-54-8-----	4,4'-DDD		
1031-07-8-----	Endosulfan sulfate		
50-29-3-----	4,4'-DDT		
72-43-5-----	Methoxychlor		
53494-70-5-----	Endrin ketone		
5103-71-9-----	alpha-Chlordane		
5103-74-2-----	gamma-Chlordane		
8001-35-2-----	Toxaphene		
12674-11-2-----	Aroclor-1016		
11104-28-2-----	Aroclor-1221		
11141-16-5-----	Aroclor-1232		
53469-22-9-----	Aroclor-1242		
12672-29-6-----	Aroclor-1248		
11097-69-1-----	Aroclor-1254		
11096-82-5-----	Aroclor-1260	2.5	

HRC 001 0811

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: <u>Occidental Chemical Corp.</u>	Contract: _____	S-22166001A1
Lab Code: _____	Case No.: _____	SAS No.: _____ SDG No.: _____
Matrix: (soil/water) <u>Soil</u>	Lab Sample ID: <u>37-1648</u>	
Sample wt/vol: <u>1.28</u> (g/mL) <u>10</u>	Lab File ID: _____	
Level: (low/med) <u>Med</u>	Date Received: <u>12/18/87</u>	
% Moisture: not dec. <u> </u> dec. <u>X</u>	Date Extracted: <u>12/21/87</u>	
Extraction: (SepF/Cont/Sonc) <u>Sonc</u>	Date Analyzed: <u>12/23/87</u>	
GPC Cleanup: (Y/N) <u>N</u>	pH: <u>----</u>	Dilution Factor: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>ug/g</u>	Q
319-84-6-----	alpha-BHC		
319-85-7-----	beta-BHC		
319-86-8-----	delta-BHC		
58-89-9-----	gamma-BHC(Lindane)		
76-44-8-----	Heptachlor		
309-00-2-----	Aldrin		
1024-57-3-----	Heptachlor epoxide		
959-98-8-----	Endosulfan I		
60-57-1-----	Dieldrin		
72-55-9-----	4,4'-DDE		
72-20-8-----	Endrin		
33213-65-9-----	Endosulfan II		
72-54-8-----	4,4'-DDD		
1031-07-8-----	Endosulfan sulfate		
50-29-3-----	4,4'-DDT		
72-43-5-----	Methoxychlor		
53494-70-5-----	Endrin ketone		
5103-71-9-----	alpha-Chlordane		
5103-74-2-----	gamma-Chlordane		
8001-35-2-----	Toxaphene		
12674-11-2-----	Aroclor-1016		
11104-28-2-----	Aroclor-1221		
11141-16-5-----	Aroclor-1232		
53469-22-9-----	Aroclor-1242		
12672-29-6-----	Aroclor-1248		11.3
11097-69-1-----	Aroclor-1254		
11096-82-5-----	Aroclor-1260		

HRC 001 0812

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-222 HH Oct 41

Lab Name: Occidental Chemical Corp. Contract:

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 87-1649

Sample wt/vol: 1.07 (g/mL) 10 Lab File ID: _____

Level: (low/med) Med Date Received: 12/18/87

% Moisture: not dec. dec. X Date Extracted: 12/21/87

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 12/23/87

GPC Cleanup: (Y/N) N pH: ---- Dilution Factor: 1:10

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6-----	alpha-BHC		
319-85-7-----	beta-BHC		
319-86-8-----	delta-BHC		
58-89-9-----	gamma-BHC (Lindane)		
76-44-8-----	Heptachlor		
309-00-2-----	Aldrin		
1024-57-3-----	Heptachlor epoxide		
959-98-8-----	Endosulfan I		
60-57-1-----	Dieldrin		
72-55-9-----	4,4'-DDE		
72-20-8-----	Endrin		
33213-65-9-----	Endosulfan II		
72-54-8-----	4,4'-DDD		
1031-07-8-----	Endosulfan sulfate		
50-29-3-----	4,4'-DDT		
72-43-5-----	Methoxychlor		
53494-70-5-----	Endrin ketone		
5103-71-9-----	alpha-Chlordane		
5103-74-2-----	gamma-Chlordane		
8001-35-2-----	Toxaphene		
12674-11-2-----	Aroclor-1016		
11104-28-2-----	Aroclor-1221		
11141-16-5-----	Aroclor-1232		
53469-22-9-----	Aroclor-1242		
12672-29-6-----	Aroclor-1248		
11097-69-1-----	Aroclor-1254		
11096-82-5-----	Aroclor-1260		
		562.0	

HRC 001 0813

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: Occidental Chemical Corp. Contract: _____

S-223II Oct 141

Job Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 87-1650Sample wt/vol: 1.17 (g/mL) 10 Lab File ID: _____Level: (low/med) Med Date Received: 12/18/87% Moisture: not dec. dec. X Date Extracted: 12/21/87Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 12/23/87GPC Cleanup: (Y/N) N pH: ---- Dilution Factor: _____

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/g Q

319-84-6-----alpha-BHC			
319-85-7-----beta-BHC			
319-86-8-----delta-BHC			
58-89-9-----gamma-BHC(Lindane)			
76-44-8-----Heptachlor			
309-00-2-----Aldrin			
1024-57-3-----Heptachlor epoxide			
959-98-8-----Endosulfan I			
60-57-1-----Dieldrin			
72-55-9-----4,4'-DDE			
72-20-8-----Endrin			
33213-65-9-----Endosulfan II			
72-54-8-----4,4'-DDD			
1031-07-8-----Endosulfan sulfate			
50-29-3-----4,4'-DDT			
72-43-5-----Methoxychlor			
53494-70-5-----Endrin ketone			
5103-71-9-----alpha-Chlordane			
5103-74-2-----gamma-Chlordane			
8001-35-2-----Toxaphene			
12674-11-2-----Aroclor-1016			
11104-28-2-----Aroclor-1221			
11141-16-5-----Aroclor-1232			
53469-22-9-----Aroclor-1242			
12672-29-6-----Aroclor-1248			
11097-69-1-----Aroclor-1254			
11096-82-5-----Aroclor-1260			
		4.3	

HRC 001 0814

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-224JJ601A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 87-1651

Sample wt/vol: 1.13 (g/mL) 1c Lab File ID: _____

Level: (low/med) Med Date Received: 12/18/87

% Moisture: not dec. _____ dec. X Date Extracted: 12/21/87

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 12/23/87

GPC Cleanup: (Y/N) N pH: ---- Dilution Factor: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>ug/g</u>	Q
---------	----------	---	---

319-84-6-----	alpha-BHC		
319-85-7-----	beta-BHC		
319-86-8-----	delta-BHC		
58-89-9-----	gamma-BHC(Lindane)		
76-44-8-----	Heptachlor		
309-00-2-----	Aldrin		
1024-57-3-----	Heptachlor epoxide		
959-98-8-----	Endosulfan I		
60-57-1-----	Dieldrin		
72-55-9-----	4,4'-DDE		
72-20-8-----	Endrin		
33213-65-9-----	Endosulfan II		
72-54-8-----	4,4'-DDD		
1031-07-8-----	Endosulfan sulfate		
50-29-3-----	4,4'-DDT		
72-43-5-----	Methoxychlor		
53494-70-5-----	Endrin ketone		
5103-71-9-----	alpha-Chlordane		
5103-74-2-----	gamma-Chlordane		
8001-35-2-----	Toxaphene		
12674-11-2-----	Aroclor-1016		
11104-28-2-----	Aroclor-1221		
11141-16-5-----	Aroclor-1232		
53469-22-9-----	Aroclor-1242		
12672-29-6-----	Aroclor-1248		
11097-69-1-----	Aroclor-1254		
11096-82-5-----	Aroclor-1260		

HRC

001 0815

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-225 KK CO, A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 87-1652

Sample wt/vol: 1.09 (g/mL) 1D

Lab File ID: _____

Level: (low/med) Med

Date Received: 12/18/87

* Moisture: not dec. dec. X

Date Extracted: 12/21/87

Extraction: (SepF/Cont/Sonc) Sonc

Date Analyzed: 12/23/87

GPC Cleanup: (Y/N) N pH: ----

Dilution Factor: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>ug/g</u>	Q
319-84-6-----	alpha-BHC		
319-85-7-----	beta-BHC		
319-86-8-----	delta-BHC		
58-89-9-----	gamma-BHC(Lindane)		
76-44-8-----	Heptachlor		
309-00-2-----	Aldrin		
1024-57-3-----	Heptachlor epoxide		
959-98-8-----	Endosulfan I		
60-57-1-----	Dieldrin		
72-55-9-----	4,4'-DDE		
72-20-8-----	Endrin		
33213-65-9-----	Endosulfan II		
72-54-8-----	4,4'-DDD		
1031-07-8-----	Endosulfan sulfate		
50-29-3-----	4,4'-DDT		
72-43-5-----	Methoxychlor		
53494-70-5-----	Endrin ketone		
5103-71-9-----	alpha-Chlordane		
5103-74-2-----	gamma-Chlordane		
8001-35-2-----	Toxaphene		
12674-11-2-----	Aroclor-1016		
11104-28-2-----	Aroclor-1221		
11141-16-5-----	Aroclor-1232		
53469-22-9-----	Aroclor-1242		
12672-29-6-----	Aroclor-1248		
11097-69-1-----	Aroclor-1254		
11096-82-5-----	Aroclor-1260		0.7

HRC
001
0816

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

5-226LL6C1A1

Lab Name: Occidental Chemical Corp.

Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil

Lab Sample ID: 97-1653

Sample wt/vol: 1.04 (g/mL) 10

Lab File ID: _____

Level: (low/med) Med

Date Received: 12/18/87

% Moisture: not dec. dec. X

Date Extracted: 12/21/87

Extraction: (SepF/Cont/Sonc) Sonc

Date Analyzed: 12/23/87

GPC Cleanup: (Y/N) N pH: ----

Dilution Factor: _____

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/g

Q

CAS NO.	COMPOUND			
319-84-6-----	alpha-BHC			
319-85-7-----	beta-BHC			
319-86-8-----	delta-BHC			
58-89-9-----	gamma-BHC (Lindane)			
76-44-8-----	Heptachlor			
309-00-2-----	Aldrin			
1024-57-3-----	Heptachlor epoxide			
959-98-8-----	Endosulfan I			
60-57-1-----	Dieldrin			
72-55-9-----	4,4'-DDE			
72-20-8-----	Endrin			
33213-65-9-----	Endosulfan II			
72-54-8-----	4,4'-DDD			
1031-07-8-----	Endosulfan sulfate			
50-29-3-----	4,4'-DDT			
72-43-5-----	Methoxychlor			
53494-70-5-----	Endrin ketone			
5103-71-9-----	alpha-Chlordane			
5103-74-2-----	gamma-Chlordane			
8001-35-2-----	Toxaphene			
12674-11-2-----	Aroclor-1016			
11104-28-2-----	Aroclor-1221			
11141-16-5-----	Aroclor-1232			
53469-22-9-----	Aroclor-1242			
12672-29-6-----	Aroclor-1248			
11097-69-1-----	Aroclor-1254			
11096-82-5-----	Aroclor-1260			

40

HRC 001 0817

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: Occidental Chemical Corp. Contract: _____

S-227MM001A1

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 57-1654

Sample wt/vol: 1.04 (g/mL) ID Lab File ID: _____

Level: (low/med) Med Date Received: 12/18/87

% Moisture: not dec. _____ dec. X Date Extracted: 12/21/87

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 12/23/87

GPC Cleanup: (Y/N) N pH: ---- Dilution Factor: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>ug/g</u>	Q
319-84-6-----	alpha-BHC		
319-85-7-----	beta-BHC		
319-86-8-----	delta-BHC		
58-89-9-----	gamma-BHC(Lindane)		
76-44-8-----	Heptachlor		
309-00-2-----	Aldrin		
1024-57-3-----	Heptachlor epoxide		
959-98-8-----	Endosulfan I		
60-57-1-----	Dieldrin		
72-55-9-----	4,4'-DDE		
72-20-8-----	Endrin		
33213-65-9-----	Endosulfan II		
72-54-8-----	4,4'-DDD		
1031-07-8-----	Endosulfan sulfate		
50-29-3-----	4,4'-DDT		
72-43-5-----	Methoxychlor		
53494-70-5-----	Endrin ketone		
5103-71-9-----	alpha-Chlordane		
5103-74-2-----	gamma-Chlordane		
8001-35-2-----	Toxaphene		
12674-11-2-----	Aroclor-1016		
11104-28-2-----	Aroclor-1221		
11141-16-5-----	Aroclor-1232		
53469-22-9-----	Aroclor-1242		
12672-29-6-----	Aroclor-1248		
11097-69-1-----	Aroclor-1254		
11096-82-5-----	Aroclor-1260	7.4	

HRC 001 0818

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-228MM02A1

Lab Name: Occidental Chemical Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: S7-1655Sample wt/vol: 10.01 (g/mL) 10 Lab File ID: _____Level: (low/med) Med Date Received: 12/18/87% Moisture: not dec. _____ dec. X Date Extracted: 12/21/87Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 12/23/87GPC Cleanup: (Y/N) N pH: ---- Dilution Factor: 1:10

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
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319-84-6-----	alpha-BHC		
319-85-7-----	beta-BHC		
319-86-8-----	delta-BHC		
58-89-9-----	gamma-BHC (Lindane)		
76-44-8-----	Heptachlor		
309-00-2-----	Aldrin		
1024-57-3-----	Heptachlor epoxide		
959-98-8-----	Endosulfan I		
60-57-1-----	Dieldrin		
72-55-9-----	4,4'-DDE		
72-20-8-----	Endrin		
33213-65-9-----	Endosulfan II		
72-54-8-----	4,4'-DDD		
1031-07-8-----	Endosulfan sulfate		
50-29-3-----	4,4'-DDT		
72-43-5-----	Methoxychlor		
53494-70-5-----	Endrin ketone		
5103-71-9-----	alpha-Chlordane		
5103-74-2-----	gamma-Chlordane		
8001-35-2-----	Toxaphene		
12674-11-2-----	Aroclor-1016		
11104-28-2-----	Aroclor-1221		
11141-16-5-----	Aroclor-1232		
53469-22-9-----	Aroclor-1242		
12672-29-6-----	Aroclor-1248		
11097-69-1-----	Aroclor-1254		
11096-82-5-----	Aroclor-1260		8.5

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: Occidental Chemical Corp. Contract: _____

S-22900 001A1

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 87-1656Sample wt/vol: 1.02 (g/mL) 10 Lab File ID: _____Level: (low/med) Med Date Received: 12/18/87% Moisture: not dec. dec. X Date Extracted: 12/21/87Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 12/23/87GPC Cleanup: (Y/N) N pH: ---- Dilution Factor: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>ug/g</u>	Q
319-84-6-----	alpha-BHC		
319-85-7-----	beta-BHC		
319-86-8-----	delta-BHC		
58-89-9-----	gamma-BHC (Lindane)		
76-44-8-----	Heptachlor		
309-00-2-----	Aldrin		
1024-57-3-----	Heptachlor epoxide		
959-98-8-----	Endosulfan I		
60-57-1-----	Dieldrin		
72-55-9-----	4,4'-DDE		
72-20-8-----	Endrin		
33213-65-9-----	Endosulfan II		
72-54-8-----	4,4'-DDD		
1031-07-8-----	Endosulfan sulfate		
50-29-3-----	4,4'-DDT		
72-43-5-----	Methoxychlor		
53494-70-5-----	Endrin ketone		
5103-71-9-----	alpha-Chlordane		
5103-74-2-----	gamma-Chlordane		
8001-35-2-----	Toxaphene		
12674-11-2-----	Aroclor-1016		
11104-28-2-----	Aroclor-1221		
11141-16-5-----	Aroclor-1232		
53469-22-9-----	Aroclor-1242		
12672-29-6-----	Aroclor-1248		
11097-69-1-----	Aroclor-1254		
11096-82-5-----	Aroclor-1260		

HRC 001
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1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: Occidental Chemical Corp. Contract: _____

S-230 PP 001A1

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 87-1657Sample wt/vol: 1.14 (g/mL) 10 Lab File ID: _____Level: (low/med) Med Date Received: 12/18/87% Moisture: not dec. dec. X Date Extracted: 12/21/87Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 12/23/87GPC Cleanup: (Y/N) N pH: ---- Dilution Factor: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6-----	alpha-BHC		
319-85-7-----	beta-BHC		
319-86-8-----	delta-BHC		
58-89-9-----	gamma-BHC(Lindane)		
76-44-8-----	Heptachlor		
309-00-2-----	Aldrin		
1024-57-3-----	Heptachlor epoxide		
959-98-8-----	Endosulfan I		
60-57-1-----	Dieldrin		
72-55-9-----	4,4'-DDE		
72-20-8-----	Endrin		
33213-65-9-----	Endosulfan II		
72-54-8-----	4,4'-DDD		
1031-07-8-----	Endosulfan sulfate		
50-29-3-----	4,4'-DDT		
72-43-5-----	Methoxychlor		
53494-70-5-----	Endrin ketone		
5103-71-9-----	alpha-Chlordane		
5103-74-2-----	gamma-Chlordane		
8001-35-2-----	Toxaphene		
12674-11-2-----	Aroclor-1016		
11104-28-2-----	Aroclor-1221		
11141-16-5-----	Aroclor-1232		
53469-22-9-----	Aroclor-1242		
12672-29-6-----	Aroclor-1248		
11097-69-1-----	Aroclor-1254		
11096-82-5-----	Aroclor-1260		10.4

HRC 001 0821

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: Occidental Chemical Corp.

Contract: _____

S-231 QQ 001A1

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 87-1653

Sample wt/vol: 1.20 (g/mL) Lab File ID: _____

Level: (low/med) Med Date Received: 12/18/87

% Moisture: not dec. dec. X Date Extracted: 12/21/87

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 12/23/87

GPC Cleanup: (Y/N) N pH: ---- Dilution Factor: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>ug/g</u>	Q
319-84-6-----	alpha-BHC		
319-85-7-----	beta-BHC		
319-86-8-----	delta-BHC		
58-89-9-----	gamma-BHC (Lindane)		
76-44-8-----	Heptachlor		
309-00-2-----	Aldrin		
1024-57-3-----	Heptachlor epoxide		
959-98-8-----	Endosulfan I		
60-57-1-----	Dieldrin		
72-55-9-----	4,4'-DDE		
72-20-8-----	Endrin		
33213-65-9-----	Endosulfan II		
72-54-8-----	4,4'-DDD		
1031-07-8-----	Endosulfan sulfate		
50-29-3-----	4,4'-DDT		
72-43-5-----	Methoxychlor		
53494-70-5-----	Endrin ketone		
5103-71-9-----	alpha-Chlordane		
5103-74-2-----	gamma-Chlordane		
8001-35-2-----	Toxaphene		
12674-11-2-----	Aroclor-1016		
11104-28-2-----	Aroclor-1221		
11141-16-5-----	Aroclor-1232		
53469-22-9-----	Aroclor-1242		
12672-29-6-----	Aroclor-1248		
11097-69-1-----	Aroclor-1254		
11096-82-5-----	Aroclor-1260		
		1.4	

HRC 001 0822

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: Occidental Chemical Corp. Contract: _____

S-232FB AD1.41

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: 97-1659

Sample wt/vol: 1.08 (g/mL) 10 Lab File ID: _____

Level: (low/med) Med Date Received: 12/18/87

% Moisture: not dec. _____ dec. X Date Extracted: 12/21/87

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 12/23/87

GPC Cleanup: (Y/N) N pH: ---- Dilution Factor: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/g	Q
319-84-6-----	alpha-BHC		
319-85-7-----	beta-BHC		
319-86-8-----	delta-BHC		
58-89-9-----	gamma-BHC (Lindane)		
76-44-8-----	Heptachlor		
309-00-2-----	Aldrin		
1024-57-3-----	Heptachlor epoxide		
959-98-8-----	Endosulfan I		
60-57-1-----	Dieldrin		
72-55-9-----	4,4'-DDE		
72-20-8-----	Endrin		
33213-65-9-----	Endosulfan II		
72-54-8-----	4,4'-DDD		
1031-07-8-----	Endosulfan sulfate		
50-29-3-----	4,4'-DDT		
72-43-5-----	Methoxychlor		
53494-70-5-----	Endrin ketone		
5103-71-9-----	alpha-Chlordane		
5103-74-2-----	gamma-Chlordane		
8001-35-2-----	Toxaphene		
12674-11-2-----	Aroclor-1016		
11104-28-2-----	Aroclor-1221		
11141-16-5-----	Aroclor-1232		
53469-22-9-----	Aroclor-1242		
12672-29-6-----	Aroclor-1248		
11097-69-1-----	Aroclor-1254		
11096-82-5-----	Aroclor-1260	0.0	

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DEC 09 REC'D

To A. F. Weston
From T.J. Yagley
Subject Analysis of Four Soil Samples from Hicksville for Aroclor 1248

Date November 19, 1987
REVISED: 12/08/87

COPIES: P.T. Holt, R.G. Badger, TIC

SUMMARY

On October 28, 1987, four soil samples from the Hicksville, NY site were taken into custody at the Grand Island Technology Center. Using SW-846 methodology, these four samples were analyzed for Aroclor 1248 at a detection limit of 0.1 ug/g (ppm). The identity and PCB content were as follows:

ETC #	Location	ug/g Aroclor 1248
R2705	Q3	76
R2707	Q5	12
R2708	R3	13
R2709	R4	46

EXPERIMENTAL

The soil samples were prepared for analysis by using protocol as described in SW-846.

A portion of the sample was carefully weighed into a small beaker, and with stirring, kiln dried sodium sulfate was added until the mixture had the consistency of dry sand. If the sample was to be spiked for recovery information, it was done at this time. The mixture was extracted once with 10 mL of hexane (B&J Distilled in Glass) by use of a sonic probe. With careful rinsing the extract was transferred through a Pasteur pipet packed with glass wool and sodium sulfate into a 15 mL concentrator tube. The extract was adjusted to a final working volume of 10.0 mL by nitrogen blow-down.

The extracts were analyzed on a Hewlett-Packard 5840 Gas Chromatograph using a 30 meter fused silica DB-5 capillary column under the following conditions:

- Temperature Program - 140°C for 1 min, then 3.0°C/min to 190°C and hold for 7 minutes then 1.0°C/min to 240°C and hold for 20 minutes
- Detector - Ni⁶³ Electron Capture @ 350°C
- Injection Mode - Splitless, 0.5 min purge, port at 250°C:
- Carrier Gas - Helium @ 2 cc/minute
- Make-up Gas - 5% Methane in Argon @ 50 cc/min.

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OxyChem

A.F. Weston
ANALYSIS OF FOUR SOIL SAMPLES FROM
HICKSVILLE FOR AROCLOR 1248
November 19, 1987

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Aroclor 1248 in the extract was quantitated by summing the area counts of ten peaks and then comparison with the summed area counts of known Aroclor 1248 standards. A five point calibration curve was found to have a correlation coefficient of 0.9951. If the summed total of the area count in the extract exceeded the linear range of the standards the extract was diluted and reanalyzed.

RESULTS AND DISCUSSION

The results of the analysis can be found in Table I. All numbers are reported on a ug/g dry weight basis. Cross references to the Occidental sample number, the ETC number and the field identification are all given. Table II contains the results of a duplicate analysis, in which Q5 was prepared and analyzed in duplicate. The results of spike recoveries are found in Table III. The Aroclor 1248 content was low enough in Q5 to allow for spiking, and the recovery of a 2 ug/g spike was excellent. A blank soil was spiked at 2 ug/g and its recovery was also excellent.

Timothy Yagley
Timothy J. Yagley
Chemist
Central Sciences

/jb

REVISED: 12/08/87

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TABLE I
Results of Analysis
Aroclor 1248 Content
(ug/g dry weight)

Field Identification	ETC #	OCC #	ug/g Aroclor 1248
201Q3001A1	R2705	87-963	76
203Q5001A1	R2707	87-964	12
204R3001A1	R2708	87-965	13
205R4001A1	R2709	87-966	46

TABLE II
Results of Duplicate Analysis
Aroclor 1248 Content
(ug/g dry weight)

Field Identification	ETC #	OCC #	Exp 1	Exp 2
203Q5001A1	R2707	87-964	13	10

TABLE III
Results of Spiking Experiments
Recovery of Aroclor 1248
(ug/g dry weight)

Sample ID

: 203Q5001A1

Analysis	Added	Expected	Found	Recovered	% Recovery
11.5	2.0	13.5	13.3	1.8	90

Sample ID: Blank Soil

ND 0.1 2.0 2.0 2.0 100

REVISED: 12/08/87